

**Transcript of the  
Joint FAA/Industry Symposium  
on  
Level B Airplane Simulator  
Motion Requirements**

Part 2 of 9

Preface

**Washington Dulles Airport Hilton  
June 19 - 20, 1996**

## Preface

This is the transcript of the *Joint FAA/Industry Symposium on Level B Airplane Simulator Motion Requirements* held on June 19 - 20, 1996, at the Washington Dulles Airport Hilton. The purpose of the meeting was to discuss the motion considerations associated with updating FAA qualification requirements for Level B flight simulators. It is available to the public on 3.5" high density drive diskettes in Adobe Acrobat Portable Document File (PDF) format from Dr. Thomas Longridge, Advanced Qualification Program Manager, AFS-230, Tel. 703-661-0275. The document is platform, application, and font independent and may be viewed and printed using Adobe Acrobat Reader, V. 3.0 for PC, UNIX, or Macintosh. The Reader is available from the Internet at <http://www.acrobat.com> or, upon request, on a second diskette.

Flight simulator technology has advanced significantly during the past decade, one result of which is that device capability has increased while cost has declined. However, for commuter airlines, cost continues to be an obstacle to flight simulator access, particularly for recurrent training. We believe that it may be possible to revise Level B simulator qualification procedures and requirements to enhance affordability, without degrading the standards or quality of performance for such equipment. The first step in this endeavor is a comprehensive review, which began with aeromodeling and flight data considerations and continues with the discussion of motion requirements reported in this transcript. The overall project is described in Longridge, T., Ray, P., Boothe, E., & Bürki-Cohen, J. (1996): Initiative towards more affordable flight simulators for U.S. commuter airline training, *Royal Aeronautical Society Conference on Training - Lowering the Cost, Maintaining the Fidelity* (pp. 2.1-2.17), London, UK, in 07Apndx1.pdf. 08Apndx2.pdf contains the conclusions from both workshops. The pertinent literature from the past two decades, including broad guidelines for an appropriate research design, is discussed in Bürki-Cohen, J., Soja, N., & Longridge, T.: Simulator Platform Motion—The Need Revisited, submitted to the *International Journal of Aviation Psychology*, in 09Apndx3.pdf.

Attendance at the symposium was by invitation only and included experts from industry, academia, and government in the disciplines of simulator motion, simulator qualification, aircraft certification, air carrier pilot training, and human factors (03Partic.pdf). The meeting was chaired by Dr. Thomas Longridge, with the participation and cooperation of Mr. Paul Ray, Manager of the FAA's National Simulator Program. The technical discussions were led by Mr. Edward Boothe. Mr. Donald Eldredge of Battelle was responsible for the meeting logistics. The discussions were recorded live by Mr. Dave and Ms. Allison Hoyman of RealTime Reporters. Dr. Nancy Soja incorporated the participants' comments. Ms. Mary Townsend and Ms. Julie Guinn applied the final editing touches to the transcript. The overall project is managed for Dr. Eleana Edens of the FAA's Office of the Chief Scientist for Human Factors by Dr. Judith Bürki-Cohen of the Department of Transportation's Volpe Center. We extend our highest appreciation and gratitude to all.